

10/771,722

1-17. (CANCELED)

18. (CURRENTLY AMENDED) The hydrodynamic converter according to claim ~~[[17]]~~ 22, wherein said primary clutch (PK) connects, via ~~[[a]]~~ the converter shell (7), the output (6) from said engine with ~~[[a]]~~ the pump hub (8) of said pump (2).

19. (CURRENTLY AMENDED) The hydrodynamic converter according to claim ~~[[17]]~~ 22, wherein an outer disc carrier of said primary clutch (PK) is connected with ~~[[a]]~~ the converter shell (7) and ~~[[an]]~~ the inner disk carrier of said primary clutch (PK) is connected with ~~[[a]]~~ the pump hub (8).

20. (CURRENTLY AMENDED) The hydrodynamic converter according to claim ~~[[17]]~~ 22, wherein a transmission system pressure ~~[[being]]~~ is regulated by one of with or without a pressure ramp independently of the converter pressure.

21. (CANCELED)

22. (CURRENTLY AMENDED) ~~[[The]]~~ A hydrodynamic converter for a power train of a motor vehicle comprising one pump (2), one turbine (3) connected with a transmission input shaft (4) and one stator (5), and the pump (2) being detachably connectable, via a primary clutch (PK), with an output (6) from an engine:

wherein said primary clutch (PK) is situated in a transmission (G);

converter oil flows through said primary clutch (PK) and the primary clutch (PK) is actuatable by converter pressure;

said primary clutch (PK) is engaged by a spring (12), a piston (11) of said primary clutch (PK) is movable by the converter pressure, against a bias of the spring (12), so that said primary clutch (PK) disengages, and according to claim 17;
 wherein

a gap between a pump hub (8) and a guide wheel shaft (9) is sealed so that the oil can be fed to an inner disc carrier of said primary clutch (PK), and said inner disc carrier has apertures (10) such that the oil arrives at discs by passing through said apertures (10), grooves are provided in a friction lining which outwardly convey the oil, and the oil flows axially to said converter (1) through a gap between the pump hub (8) and a converter shell (7) and via holes in the gap between the pump hub (8) and the guide wheel shaft (9).

23. (CURRENTLY AMENDED) The hydrodynamic converter according to claim ~~[[17]]~~ 22, wherein said pressure for disengaging said primary clutch (PK) is regulatable with or without a pressure ramp.

10/13/05 - 11:18 AM

- 2 -

10/771,722

24. (PREVIOUSLY PRESENTED) The hydrodynamic converter according to claim 23, wherein said primary clutch (PK) has a baffle plate (16) which facilitates a rotation-pressure compensation.

25. (CANCELED)

26. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[17]] 22, wherein said primary clutch (PK) can be engaged by reducing the pressure acting on the piston (11) of said primary clutch (PK).

27. (CANCELED)

28. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[17]] 22, wherein for exact regulation of torque of said primary clutch (PK), the converter pressure can be measured for determining a clutch actuation pressure via a return of the pressure to a control valve or by a pressure sensor.

29. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[17]] 22, wherein a toothing, mounted upon an outer border of said primary clutch (PK), can be used for driving at least one of an accessory unit, a PTO's direct engine-driven gear and to caliper an engine rotational speed.

30. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[17]] 22, wherein said primary clutch comprises at least one of a pressure sensor (14) for detecting at least one of a piston pressure and a rotational speed sensor (15) for detecting the pump rotational speed.

31. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[17]] 22, wherein the hydrodynamic converter further comprises a converter lock-up clutch (WK).

32. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[17]] 22, wherein said primary clutch is mounted in said transmission (G) to facilitate coupling of the hydrodynamic converter to the transmission (G).

33. (CANCELED)

34. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[33]] 40, wherein a toothing, mounted upon an outer periphery of the primary clutch (PK), is available for driving at least one of an accessory unit, a PTO's direct engine-driven gear and to caliper an engine rotational speed.

35. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[33]] 40, wherein the primary clutch comprises at least one of a pressure

10/13/05 - 11:18 AM

10/771,722

sensor (14) for detecting at least one of a piston pressure and a rotational speed sensor (15) for detecting the pump rotational speed.

36. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[33]] 40, wherein the hydrodynamic converter further comprises a converter lock-up clutch (WK).

37. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[33]] 40, wherein the primary clutch is mounted in the transmission (G) to facilitate coupling of the hydrodynamic converter to the transmission (G).

38. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[33]] 40, wherein the primary clutch (PK) connects, via [[a]] the converter shell (7), the output (6) from the engine with [[a]] the pump hub (8) of the pump (2).

39. (CURRENTLY AMENDED) The hydrodynamic converter according to claim [[33]] 40, wherein an outer disc carrier of the primary clutch (PK) is connected with [[a]] the converter shell (7) and [[an]] the inner disk carrier of the primary clutch (PK) is connected with [[a]] the pump hub (8).

40. (CURRENTLY AMENDED) [[The]] A hydrodynamic converter for a power train of a motor vehicle comprising a pump (2), a turbine (3) connected with a transmission input shaft (4) and a stator (5), and the pump (2) being detachably connectable, via a primary clutch (PK), with an output (6) from an engine;

wherein the primary clutch (PK) is situated in the transmission (G); and the primary clutch (PK) is engaged by a spring (12), and a piston (11) of the primary clutch (PK) is movable by converter pressure, against a bias of the spring (12), to disengage the primary clutch (PK); and according to claim 33, wherein

a gap between a pump hub (8) and a guide wheel shaft (9) is sealed so that the oil can be fed to an inner disc carrier of the primary clutch (PK), and the inner disc carrier has apertures (10) such that the oil arrives at discs by passing through the apertures (10), grooves are provided in a friction lining which outwardly convey the oil, and the oil flows axially to the converter (1) through the gap between the pump hub (8) and a converter shell (7) and via holes in the gap between the pump hub (8) and the guide wheel shaft (9).

10/13/05 - 11:16 AM